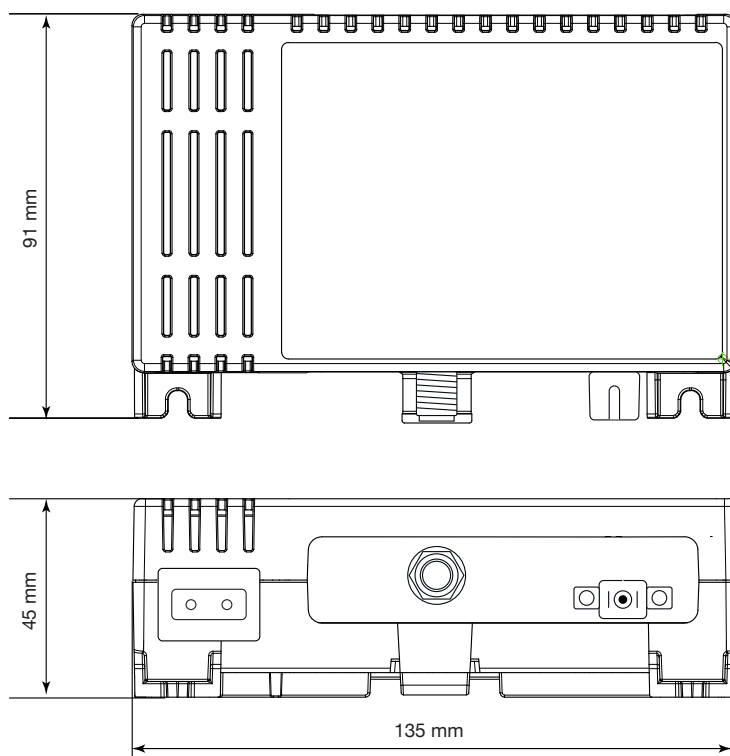


INSTALLATION MANUAL

Optical receiver FCO-IF-TC

- 1550nm optical filter
- Optical monitor Led
- A.G.C output levels
- Adjustable TV Terrestrial output level
- Adjustable IF-SAT output level
- Self power source 100... 240V
- Wall mounting and DIN rail



Ready for **UHD TV** **MADE IN ITALY**

Rel. 1.0

OPTICAL RECEIVER

OPTICAL INPUT 1

RF OUTPUTS 1

OPTICAL

OPERATION WAVELENGTH nm 1550

INPUT POWER RANGE dBm -14... 0

INPUT CONNECTOR TYPE SC/APC

RETURN LOSS dB >40

SATELLITE

OUTPUT BANDWIDTH MHz 950... 2.200

LEVEL ADJUSTER RANGE dB 0... -12

MAX TOTAL OUTPUT LEVEL dBμV 85

TV TERRESTRIAL / FM / DAB

OUTPUT BANDWIDTH MHz 80... 862

LEVEL ADJUSTER RANGE dB 0... -20

MAX TOTAL OUTPUT LEVEL dBμV 80

OTHERS

ISOLATION TV TERR./SATELLITE dB >40








OUTPUT RETURN LOSS dB > 12

INPUT VOLTAGE RANGE VAC 100... 240

MAXIMUM CONSUMPTION W 3,0

OPERATING TEMPERATURE °C 0... 50

DIMENSIONS mm 135 x 91 x 45

DESCRIPTION OF SYMBOLS AND ELECTRICAL SAFETY	
	The equipment complies with the CE requirements
	The equipment is designed for indoor use only
	Equipment grounding terminal
	This symbol indicates that the equipment complies with the class II equipment safety requirements
	To avoid the risk of electric shock, do not open the equipment.
	The equipment is compliant with RoHS 2011/65EU
	Dispose according to local authorities recycling processes

Safety instructions

1. Read carefully these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not expose this apparatus to extreme temperatures
6. Do not install this apparatus near water or expose to rain and moisture
7. Place the apparatus in a dry and well-aired location
8. Install the unit on a vertical wall, or in a waterproof cabinet with a minimum IP55 rating, and fix it safely.
9. Do not install the unit lying flat or on its top
10. Connect the power adapter cord to a detachable power supply socket
11. Unplug the apparatus during lightning storms or when unused for long time
12. Only use accessories specified by the manufacturer
13. Do not remove the cover without disconnecting from the mains first
14. Ambient temperature should not be lower than 0°C and higher than 50°C
15. Please allow air circulation around the apparatus



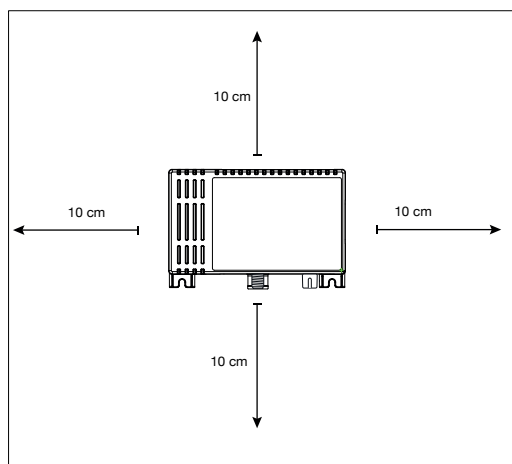
Installation warnings

Place the apparatus and the power supplier in a dry and well-aired location.
Install the unit on a vertical wall, or in a waterproof cabinet with a minimum IP55 rating.

Use only the power supplier provided.

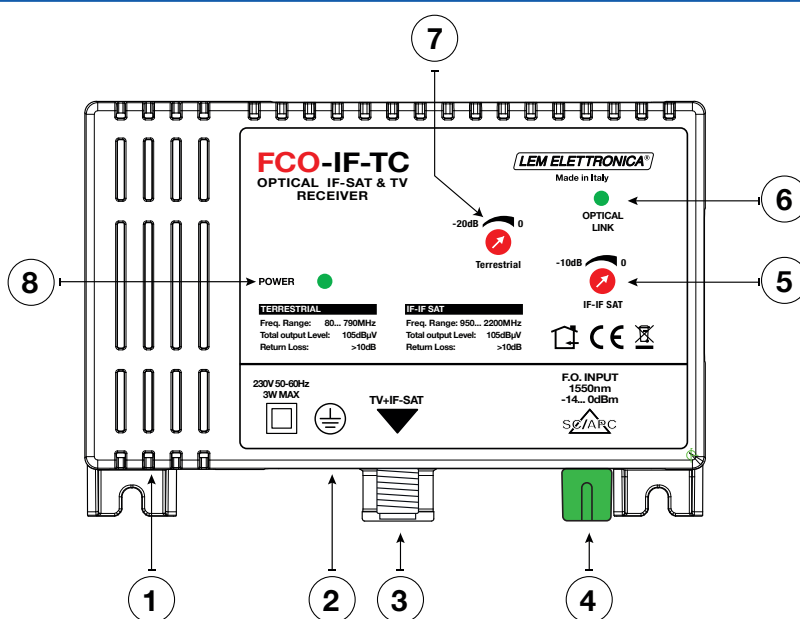
The use of not-original power suppliers determines the not-compliance of the product and can cause malfunctions and void the warranty

Recommended distance



FCO-IF-TC Description

- ① Power source input 100... 240VAC
- ② Ground bonding
- ③ FM,DAB,DTT/IF-IF SAT output
- ④ SC/APC optical input
- ⑤ IF-SAT output level adjuster
- ⑥ Led status Laser
- ⑦ TV terrestrial level adjuster



Optical signals higher than 0dBm can damage the **FCO-IF-TC** in PON with less than 4 optical points add at least a 7dBm optical attenuator.

MONITOR LED

DC Input

Off= No power

Green= Power

Optical Link

Off= No optical link

Green= Optical link

The optical receiver **FCO-IF-TC** must be used with the transmitter **TX-IF-T**. For a correct transmitter / receivers set up please follow the tables below.

SATELLITE FEEDS

Number or Optical points	Optical Attenuation	TX-IF-T Transmitter Satellite input level (single TPX)	FCO-IF-TC max. Satellite output level (single TPX)
4	- 7	80 dB μ V	100 dB μ V
8	- 10	80 dB μ V	94 dB μ V
16	-13,5	80 dB μ V	87 dB μ V
32	- 17	80 dB μ V	80 dB μ V
64	- 21	80 dB μ V	73 dB μ V

With 32 DVB-S/S2 TPX

TERRESTRIAL FEEDS

Number or Optical points	Optical Attenuation	TX-IF-T Transmitter terrestrial input level (single MUX)	FCO-IF-TC max. Terrestrial output level (single MUX)
4	- 7	70 dB μ V	90 dB μ V
8	- 10	73 dB μ V	90 dB μ V
16	-13,5	76 dB μ V	90 dB μ V
32	- 17	82 dB μ V	90 dB μ V
64	- 21	87 dB μ V	86 dB μ V

With 32 DVB-T/T2 MUX

Number or Optical points	Optical Attenuation	TX-IF-T Transmitter terrestrial input level (single MUX)	FCO-IF-TC max. output level (single MUX)
4	- 7	73 dB μ V	93 dB μ V
8	- 10	76 dB μ V	93 dB μ V
16	- 13,5	79 dB μ V	93 dB μ V
32	- 17	85 dB μ V	93 dB μ V
64	- 21	90 dB μ V	90 dB μ V

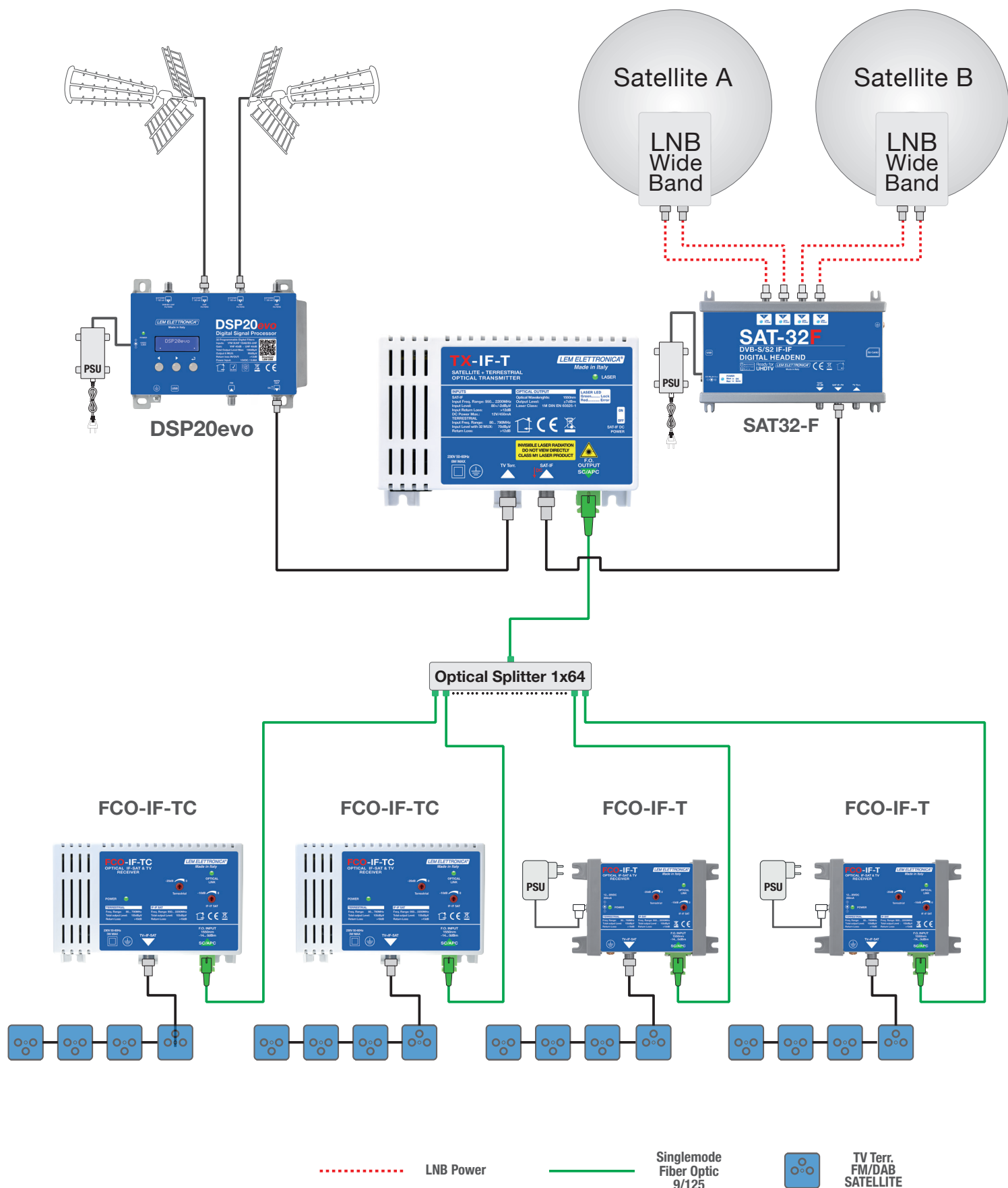
With 16 DVB-T/T2 MUX

Number or Optical points	Optical Attenuation	TX-IF-T Transmitter terrestrial input level (single MUX)	FCO-IF-TC max. output level (single MUX)
4	- 7	76 dB μ V	96 dB μ V
8	- 10	79 dB μ V	96 dB μ V
16	- 13,5	82 dB μ V	96 dB μ V
32	- 17	88 dB μ V	96 dB μ V
64	- 21	90 dB μ V	90 dB μ V

With 8 DVB-T/T2 MUX



FM and DAB signal level must be at least 10dB lower than the DTT signal



Distribution of IF-IF SAT and terrestrial feed (DTT; FM; DAB) over a single-mode optical fibre PON.

Satellite signals are selected and converted to **IF-SAT** format by the **SAT32-F** headend, while the **DSP20evo** headend handles the selection and equalization of terrestrial signals (DTT, FM, DAB).

The compact **TX-IF-T** transmitter converts the received signals into optical format for distribution over a single-mode optical fiber. The **FCO-IF-TC** and **FCO-IF-T** optical receivers convert the received signals back into electrical format, making them compatible with standard TV sets and satellite receivers.

Label with serial and tracking data

AA1000015019-X1020L

AA	100001	50	19	-X	10	20	L
└──┘	└──┘	└──┘	└──┘		└──┘	└──┘	
Model	Serial #	Manuf. Week	Manuf. Year		HW Rel.	FW Rel.	